# Innovative ARTs and Informed Consent

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### Topics addressed

- I. Protecting the interests of oocyte donors
- II. Making informed decisions when data are inconclusive
- III. Making informed decisions when interventions may result in inheritable modifications



## I. Protecting the interests of oocyte donors



# Sample guidelines for ART and oocyte donation

- Elements To Be Considered in Obtaining Informed Consent for ART (ASRM Practice Committee 1997)
- Guidelines for Oocyte Donation (ASRM Practice Committee 2002)
- Informed Consent and the Use of Gametes and Embryos for Research (ASRM Ethics Committee 1997)
- Financial Incentives in Recruitment of Oocyte Donors (ASRM Ethics Committee 2000)
- Repetitive Oocyte Donation (ASRM 2001)



# Some topics covered in 2002 oocyte donation guidelines

- Indications for use
- Evaluation of recipient and recipient's partner
- Selection of donors (anonymous v. known, age, proven fertility, sharing of oocytes)
- Psychological evaluation
- Screening and testing of donors (risk factors identified)
- Payment
- Multiple donations
- Record-keeping, consent, legal consultation



#### Purposes of donation

- Oocytes for procreation
- Oocytes for research
- Ooplasm to assist procreation
  - Ooplasm transfer (OT)
  - 5-15% ooplasm injected to recipient egg
  - First birth 1997; ~ 30 births by 2002
  - On hold



#### Risk/benefit to donors

- Oocytes for procreation
  - Potential benefit (altruism): high
  - Potential emotional risk: high
  - Health risks
- Ooplasm to assist procreation
  - Potential benefit (altruism): medium
  - Potential emotional risk: low
  - Health risks



#### Donating for ooplasm transfer

- Compensation
  - "Payment should not be predicated on clinical outcome"
  - "Monetary compensation . . . should reflect the time, inconvenience, and physical and emotional demands and risks . . . ."
  - "Payments . . . should be fair and not so substantial that they become undue inducements that will lead donors to discount risks."



#### Potential limits on donation

- Fewer constraints than whole oocyte donation (e.g., inadvertent consanguineous mating)
- Health risks
- Age
- Previous motherhood
- Psychological counseling



#### Other issues

- Family pressures to donate
- Privacy protection
- Notification of adverse outcomes from testing
- Clarifying that will not be genetic parent
- Legal consultation



II. Making informed decisions when data about safety and efficacy are inconclusive



- 1. The health of children is at issue
- 2. Patients thought to be vulnerable
- 3. Patients often pay out of pocket
- 4. Animal data and ICSI
- 5. Research involving human embryos not publicly funded



### Some questions to ask

- Will this pose risks to my child?
- Will this pose risks to me?
- Have benefits been documented?
- Have harmful effects been documented?
- Will this benefit someone with my condition?



### Some questions to ask

- What is this clinic's experience with the procedure?
- What are alternatives to the procedure, including adoption and deciding not to treat?



## Making decisions when data are inconclusive

- Access to clear and manageable information
- Access to neutral information
- Interpreting animal-based studies
- Understanding status of procedure
- Styles of decision-making involving risk
- Interactive consent process
- Deciding who pays



III. Making informed decisions when interventions may result in inheritable modifications



## Two categories of inheritable modifications

- Alterations to nuclear DNA
  - Performed with animals
  - Not on immediate horizon for humans
- Alterations to cytoplasm (mtDNA)
  - Ooplasm transfer and heteroplasmy reported in at least 2 children
  - On hold



## Differing perspectives on OT

- Permissive: should proceed with existing oversight mechanisms
- Cautionary: proceeding may eventually be possible with heightened oversight
- Prohibitive: should never proceed



#### Permissive:

- Inheritance of mtDNA not automatically troublesome
- Foreseeable benefits (broad)
- Is primarily a matter of parental autonomy
- Implication: consent may be given when safety and efficacy demonstrated



#### Cautionary:

- Inheritance of mtDNA troublesome
- Benefits are visualized (narrow)
- Societal and individual interests are balanced
- Implication: consent eventually may be given if conditions are met (data collection, new oversight body and/or IND process, public discussion)



#### Prohibitive:

- mtDNA crosses a line and sets the stage for nDNA alterations
- Is no clear benefit; less problematic alternatives available
- Societal interests outweigh individual choice
- Implication: consent to proceed may not be given by couples even if safety is assured



- Making informed decisions if OT proceeds under cautionary approach
  - Core informed consent guidelines
  - Guidelines when data inconclusive
  - Animal data across generations
  - Access to clear information about data reported in IND application
  - Emotions if child's health compromised



## Building on informed consent

- Start with core informed consent guidelines
- Premium on decipherable information
- Study how patients perceive and act on risk
- Public/private data gathering and distribution (FCSRA model)